

# Emergency Operations Transition Plan

Incident Name: Reed Point MT Derailment

Incident Date: 6/24/2023

FOSC Craig Myers  
Craig Myers (Sep 4, 2023 14:56 MDT)

SOSC Larry Alheim  
Larry Alheim (Aug 31, 2023 06:52 MDT)

RPIC Jeff Carpenter  
Jeff Carpenter (Aug 30, 2023 15:12 MDT)

TOSC \_\_\_\_\_

LOSC David Stamey  
David Stamey (Sep 6, 2023 19:23 MDT)

SOFCR \_\_\_\_\_

OSC \_\_\_\_\_

PREPARED BY: Jason Potts  
Operations Section Chief

## **INCIDENT SPECIFICS**

On June 24, 2023, a Montana Rail Link train derailed east of the town of Reed Point, Montana. The tank cars involved in the derailment contained molten sulfur, asphalt, sodium hydrosulfide, and aluminum scrap metal. The contents of the sodium hydrosulfide cars were successfully transferred to intact tank cars and no releases occurred. Some of the asphalt tank cars were damaged during the derailment and an estimated 400,000-440,000 pounds of asphalt were released to the Yellowstone River. Estimates were made by evaluating each tank car as it was removed from the river and determining the volume of product remaining in each car. Cars were re-evaluated once they were moved to the containment area and volume estimates were adjusted.

Site Location: East of Reed Point, Montana



## **Purpose:**

This plan serves to identify procedures to be followed by personnel involved with asphalt recovery operations and the transition from an emergency to a maintenance phase of operations.

During the emergency, that began on June 24<sup>th</sup>, 2023, the Unified Command (UC)), comprised of the US EPA, MT DEQ, Montana Rail Link, and Stillwater Fire/DES, set a list of initial objectives which included:

- Ensure life safety during all phases of the response.
- Stabilize the site.
- Control the source by removing asphalt cars from damaged trestle.
- Assess environmental impacts.
- Utilize a Joint Information Center (JIC) to disseminate the appropriate information internally and externally.
- Plan for recovery operations.
- Establish short- and long-term monitoring plans.
- Keep Stakeholders Informed of Response Activities.

As response efforts progressed and the site was stabilized and the source of asphalt was removed, objectives were redefined to include:

- Provide for the Safety of the Public and Response Personnel
- Keep the Public Informed of Response Activities
- Maximize Protection of Environmentally and Culturally Safe Areas
- Maximizing Collection of Actionable Asphalt
- Actively Plan to Reduce Command Footprint and Plan for Demobilization

The Operations Team committed to these operational objectives and completed the following items over nine (9) Operational Periods with the following results:

**Ensure life safety during all phases of the response.**

- Only two (2) first aid events occurred that required a higher level of medical care than what our on-site Emergency Medical Technicians (EMTs) were able to give.  
*(Note: Both employees returned to work the next day)*
- MRL and the Operations Team deployed a safety boat at Reed Point for the 60<sup>th</sup> Annual Yellowstone Boat Float from July 10<sup>th</sup>-13<sup>th</sup>. This was not a requirement, but under the objective of safety of the public and responders, MRL wanted to provide a safety team in the river closure area to minimize anyone from possibly encountering river hazards near the bridge. During this event, the safety boat rescued two (2) people that were at very real risk of great personnel injury. They had four (4) additional safety assists.
- On 7/31/2023 a vessel from one of the Operations Task Forces was working at derailment RM 41.5 where the crew noticed a man standing on the bank waving his arms over his head signaling for help. Upon further investigation, the crew noticed two rafts overturned and pinned against the grate at a water intake. The operator of the vessel brought the boat into a rescue position and the technicians deployed a rescue line. The first person was pulled out and into good water with their raft. The vessel made another approach, and the rescue line was deployed to pull the second person to good water with their raft. The operator asked if medical assistance was needed, but both declined.

- Multiple workdays with 95+ weather resulted in four (4) heat stress situations. On-site EMTs were able to treat all incidents. No higher level of medical care was needed.
- Responders have traveled over 50,000 river miles within the identified impact area from river mile 0.0 to river mile 136, as defined by SCAT, with no significant damage to any response equipment, despite the changing river conditions. This data was gathered on our vessel tracking system.
- Two (2) significant storm events occurred where Operations evacuated the river operations teams to their predetermined safe havens in less than 45 minutes.
- Due to the safety of the public and responders, all operational areas were assessed for closure to the public. Any area that was identified for public closure was discussed with the appropriate agency representatives (State and Local), prior to closure.

**Keep the Public Informed of Response Activities:**

- MRL provided all laboratory analytical data to UC. Real-time air quality monitoring was provided directly to the EPA for display on their webpage.
- Provided information to the PIO's, as requested, to ensure the public was informed.
- Ensured the safe deployment of a media day to give the media an opportunity to see the field operations in real time.
- MRL has currently responded to over 25 information requests from the public via the rpderrailment email hotline, direct phone calls with agency representatives, MRL personnel directly and/or community members reporting to responders in the field.

**Maximize Protection of Environmentally and Culturally Safe Areas:**

- The Operations Team and responders adhered to and reported all Critical Information Requests (CIRs) to UC, which included:
  - Discovery of dead or asphalt impacted wildlife.
  - Cultural artifacts discovery
- Worked closely with Professor Kayhan Ostovar, the Director of the Yellowstone River Research Center, to identify sensitive turtle nesting areas. This detailed assessment and information was utilized to guide Operations to ensure nesting habitat was protected. Professor Ostovar was consulted when responders needed to access these nesting sites and remove actionable asphalt.
- Responders requested advice and permission before utilizing any mechanized equipment at impacted areas to ensure that the environmental impact to these areas were minimized.
- Responders were briefed on an Inadvertant Discovery Plan (IDP). This briefing was to communicate what sensitive cultural sites could look like and what to do if they were to encounter such a site.

**Maximizing Collection of Actionable Asphalt:**

- Conducted detailed assessments to identify treatable asphalt deposits along shorelines and water intakes:
  - To date, responders have collected 232,024 pounds of asphalt from the Yellowstone River which consisted of moving 10,445 bags of

asphalt with an average of 23.82 pounds per bag. This collection represents approximately 53% - 58% of the estimated 400,000-440,000 pounds of asphalt that was released during the derailment.

This collection amount was quantified utilizing the following process:

- Weighing and documenting the weight of each supersack bag.
  - The material in the bags was inspected in intervals. A percentage value was added to compensate for various debris in the asphalt. This percentage was deducted from the overall weight to compensate for “other debris” that was not asphalt (i.e., wood limbs, rocks, etc.).
- SCAT Teams surveyed 827 sites from the derailment site to RM 136. Of those 827 sites, SCAT teams were able to treat 164 sites during the survey with Operations personnel imbedded in the team; 213 sites were sent to and treated by Operations and the remainder were No Asphalt Observed or No Further Treatment Recommended. This work was completed under the original treatment guidelines approved by Unified Command and updated/approved on 8/3/2023.

**Actively Plan to Reduce Command Footprint and Plan for Demobilization:**

- Operations has consistently assessed resource needs and identified resources to demobilize as operations have changed.

## **Transition Plan:**

### **Safety is of the utmost importance while completing all phases of the operation.**

As Operations moves through Phase 1 of the Proposal for Future SCAT and Shoreline Recovery Guidelines, Approved by Unified Command on 8/3/23, Operations will continue to:

- Respond to impacted areas, as safety allows for.
- Continue processing and providing information that has been collected during the response for agency/community updates and after-action reports.
- Communicate and update all identified stakeholders at predetermined times and/or intervals, as described below.
- Demobilize equipment and personnel, as required, to be effective in the response to newly identified impacted areas.

A detailed description of these items can be found below.

### **Respond to impacted areas, as safety allows for:**

MRL has committed to leaving public information signs in the areas that have been requested by UC. These signs have a QR Code that links to the derailment informational page. This informational site has links to the [rpderailment@mtrail.com](mailto:rpderailment@mtrail.com) email to allow the public to provide input and submit data and/or photos that can be utilized to guide the remaining Task Force to address impacts as necessary.

*(Note: For consistency reasons we would ask all notifications to be processed through the [rpderailment@mtrail.com](mailto:rpderailment@mtrail.com) email.)*

As impacts are identified by the public, agency representatives, responders, etc. through the [rpderailment@mtrail.com](mailto:rpderailment@mtrail.com) email or other communications, the Task Force Leader will evaluate the impact utilizing the document: Phase 1 of the Proposal for Future SCAT and Shoreline Recovery Guidelines (*Appendix 1*). If the impact meets the guidelines the Task Force Leader will dispatch as follows:

1. Respond to the notification that it has been received and is being evaluated the same day that it is received. All field responses will be evaluated on a case-by- case basis.
2. If the impacted site can be accessed via shore, the Task Force Leader will dispatch the local land portion of the Recovery Task Force;
3. If the site cannot be accessed via shore, then a waterborne response will be evaluated, including a water response safety review.
4. The Task Force that responds to the site will collect the data as identified on Reed Point MT Bridge Derailment OPS Treatment Form (*Appendix 2*). This document requires the Recovery Task Force to collect information that has been consistently collected throughout the response.

5. The Task Force Leader will provide the SCAT Team Leader the completed Treatment Form. This will allow the SCAT Team Leader to document this impact collection accurately and consistently.
6. Once this data has been documented, the collected asphalt and/or impacted material will be weighed and disposed of at the MRL Laurel Yard in a predetermined waste collection area.
7. Once the evaluation and/or mitigation is completed, an email response will be sent to the original person, group or agency documenting the status.

*(Note: If the impacted site cannot be accessed, due to safety or other issues, The SCAT Team Leader will document the impact and this impact will be reviewed in Phase 2)*

**Continue processing and providing information that has been collected during the response for after action reports, agency/community updates:**

MRL will retain and archive all appropriate response documentation developed during the incident under the Unified Command. Any additional information that is collected by the MRL Operations Team will be retained and distributed as needed and/or requested.

**Communicate and update all identified stakeholders at predetermined times and or intervals:**

During the remainder of Phase 1, a weekly email update detailing the status of the recovery efforts will be provided to stakeholders, as identified on a Key Contact List (Appendix 3). This information will be distributed in the same manner as it is currently done (Avenza Maps, Waste collection info, Treatment Forms etc.). The frequency of reports can be adjusted based on the level of response activity.

If there is a significant development (CIR) such as a wildlife impact or impact to water intakes, an email will go out to the designated agency Key Contact List as soon as possible.

**Demobilize equipment and personnel as required to be effective in the response to newly identified impacted areas:**

The MRL Operations Team demobilized operations and support teams in a phased approach. This process has been deliberate and managed through the ICS Form 221. This document ensures that resources checking out of the incident have completed all appropriate incident business and provides the Planning Section information on resources released from the incident. Demobilization is a planned process, and this form assists with that planning. Once the Resource Unit Leader has given written notification that a resource is no longer needed, an ICS Form 221 is required to be completed.

The Demobilization Unit Leader completes portions of the form and indicates any areas that may need attention. The individual resource will have the appropriate Incident Command personnel sign off on any identified areas identified by the Demobilization Unit Leader prior to release from the incident. In this case, personnel required to sign off on demobilization is the Deputy Safety Officer, Deputy Operations Section Chief, Planning Section and Decontamination Unit Leader (for equipment).

**Conclusion:**

This proposed Transition Plan identifies a clear path for Operations through the remainder of Phase 1 of the Proposal for Future SCAT and Shoreline Recovery Guidelines and meets the objectives set forth by Unified Command. This plan has identified:

- Purpose statement for transition
- Statement for continued operations during Phase 1
- External reporting requirements, notifications, key contact list
- Critical Information Requirements (CIRs)
- Availability of critical resources
- Unique operational considerations
- Concise demobilization plan that matches the level of response required by Operations.

A plan for Phase 2 will be developed by the responsible party and submitted for review and approval prior to the start of any work in 2024. The Phase 2 plan will address but not be limited to:

- Plans for SCAT review of areas treated in Phase I
  - SCAT efforts that are necessary to address any actionable asphalt identified in Phase I that was inaccessible.
  - Plans to reassess any areas reported by the public over the remainder of Phase 1:
    - Areas of reported contamination that were treated.
    - Areas of reported contamination that were deemed to be not actionable.
  - Plans to reassess a representative percentage of impacted areas in each Division, with details on how this was determined.

- Plans to communicate all information to Key Contacts:

A description of the information that will be provided to document activities by Division, as well as a timeframe and format for delivery of that information.



**Appendix 1**  
**Phase 1 of the Proposal for Future SCAT and Shoreline Recovery**  
**Guidelines, Approved by Unified Command on 8/3/23**

## **Proposal for Future SCAT and Shoreline Recovery Guidelines**

### **Approved by Unified Command – 8/3/23**

#### **Background**

Decreasing water levels are limiting large boat usage and exposing submerged asphalt mats previously not observed by SCAT teams. Shoreline recovery crews are returning to upstream areas previously “cleaned” and removing additional materials. This has slowed downstream progress and increased the importance of efficiently collecting the largest amount of material possible before river levels drop to the point where on-water operations become too risky or very inefficient. Safety of personnel and equipment are evaluated daily by the Operations Team (Ops). Ops will update agency stakeholders as conditions change and operations are impacted. When on-water operations are no longer feasible due to safety, land-based access to actionable asphalt will be evaluated. MRL recommends a two-phase approach, as described below, and a revised set of collection guidelines to be applied through the duration of Phase 1 (current phase).

#### **Phased Approach**

- Phase 1: Late Summer/Fall 2023 - Focus now to late fall on bulk asphalt removal, efficiently and safely getting the largest deposits of asphalt in the most accessible areas (via boat and land). Small sites for treatment may be treated to completion, and potentially SCAT reviewed, but larger zones may only be partially treated. Smaller deposits, consistent with the proposed guidelines, will be left to naturally weather and degrade. MRL will continue to respond to reports of sightings of actionable asphalt related to the Reed Point derailment received through the [rpderailment@mtrail.com](mailto:rpderailment@mtrail.com) email.
- Phase 2: Mid-summer 2024 – SCAT will resurvey all untreated or partially treated zones. SCAT Teams will have small Operations crews with them to address any minor asphalt deposits. Larger or more extensive deposits will be addressed by a dedicated Operations crew. Surveys would only begin once water levels are well below the level when the incident occurred (actual level to be determined). SCAT guidelines for Phase 2 will be evaluated prior to SCAT activities commencing.

#### **Proposed Downstream SCAT Completion Guidelines for 2023**

Downstream SCAT surveys will end when the SCAT teams are finding minimal treatable asphalt at a low frequency. It is recommended that this completion target is reached when 3 or fewer treatment zones are found within a “rolling” 10-mile stretch of river.

Reed Point MT Bridge Derailment

2023-08-03

Treatment zones are defined as areas which contain deposits that meet or exceed the proposed treatment standards described below and contain more asphalt than the SCAT team feels the small team of Operations personnel embedded with the SCAT team can treat while on site. Treatment zones would require a dedicated Operations team to be mobilized to address.

Example: The SCAT teams begin surveying at RM-100 and find one treatment zone requiring a dedicated Operations team at RM-105 and a second treatment zone at RM-108 and a third treatment zone at RM-109. If the team does not find any other treatable zones by RM-110, then downstream SCAT surveys would end at RM-110 as 3 or fewer treatment zones were found within a 10-mile stretch. If, however, the team finds a fourth third treatment zone at RM-109.5, then the completion target has not been reached and the “rolling” 10 miles moves up to the first segment past the point of the first treatment zone, which would be RM-105.5, and the 10 miles starts from there.

### **Proposed Guidelines for Asphalt Removal in Phase 1 (2023)**

To help protect the safety of workers and limit additional harm to the environment through overaggressive treatment techniques and sediment removal, asphalt deposits will be treated following the guidelines below.

- Sand/Fine-grained Substrate – Asphalt deposits greater than 15 cm will be removed. Frequently deposits in sand can have a “surface expression” of less than 15 cm, but once the deposit is dug out it can often be larger than 15 cm. Smaller deposits should be quickly investigated (e.g. stick, nudged with a shoe, etc.) to determine if part of the deposit is buried and is larger than 15 cm. As outlined in the current STR, any remaining residual asphalt can be disturbed/agitated using shoves or rakes and then a light coating of sand can be scattered over the remaining asphalt.
- Pebble/Cobble Substrate – Asphalt deposits greater than 50 cm will be removed. An attempt should be made to remove as much of the substrate from the deposit as possible. Residual asphalt will remain on some substrate. As outlined in the current STR, any remaining residual asphalt can be disturbed/agitated using shoves or rakes and then a light coating of sand can be scattered over the remaining asphalt.
- Vegetation/Root balls, etc. – Only very sticky, thick, and/or dripping deposits of asphalt on vegetation or root balls will be cut and removed. Asphalt that is thin, not sticky, and weathering will be left in place. A thin coating of sand can be applied in this situation also.

These guidelines are intended to be flexible and can be adjusted in the field as different and unique situations arise. Examples include (but are not limited to):

- Several deposits on sand that are smaller than 15 cm, but nearby each other and can be collected rapidly and efficiently should be collected.
- Asphalt deposits on pebbles that are smaller than 50 cm but in the vicinity of other operations can be quickly disturbed and agitated using rakes/shovels and then a thin coating of sand can be applied.

**Appendix 2**  
**Reed Point MT Derailment OPS Treatment Form**

Reed Point MT Derailment	
Transition OPS Treatment Form	
Name:	Transition ID:
	River Mile:
Name:	Shore:
	Zone:
Date:	Gage Ht (ft):
Est Treatment Zone Length (m) (along shore)	Zone Start (dd) (or center)
Est Treatment Zone Width (m)	Lat:
# Discreet Asphalt Collected	Long:
Average Size (cm)	Zone End (dd)
Maximum Size (cm)	Lat:
# Bags Collected	Long:
Total Weight Collected (lbs)	Status:
Comments:	

Proposed Guidelines for Asphalt Removal in Phase 1 (2023)

To help protect the safety of workers and limit additional harm to the environment through overaggressive treatment techniques and sediment removal, asphalt deposits will be treated following the guidelines below.

- Sand/Fine-grained Substrate – Asphalt deposits greater than 15 cm will be removed. Frequently deposits in sand can have a “surface expression” of less than 15 cm, but once the deposit is dug out it can often be larger than 15 cm. Smaller deposits should be quickly investigated (e.g., stick, nudged with a shoe, etc.) to determine if part of the deposit is buried and is larger than 15 cm. As outlined in the current STR, any remaining residual asphalt can be disturbed/agitated using shoves or rakes and then a light coating of sand can be scattered over the remaining asphalt.
- Pebble/Cobble Substrate – Asphalt deposits greater than 50 cm will be removed. An attempt should be made to remove as much of the substrate from the deposit as possible. Residual asphalt will remain on some substrate. As outlined in the current STR, any remaining residual asphalt can be disturbed/agitated using shoves or rakes and then a light coating of sand can be scattered over the remaining asphalt.
- Vegetation/Root balls, etc. – Only very sticky, thick, and/or dripping deposits of asphalt on vegetation or root balls will be cut and removed. Asphalt that is thin, not sticky, and weathering will be left in place. A thin coating of sand can be applied in this situation also.

These guidelines are intended to be flexible and can be adjusted in the field as different and unique situations arise. Examples include (but are not limited to):

- Several deposits on sand that are smaller than 15 cm, but nearby each other and can be collected rapidly and efficiently should be collected.
- Asphalt deposits on pebbles that are smaller than 50 cm but in the vicinity of other operations can be quickly disturbed and agitated using rakes/shovels and then a thin coating of sand can be applied.

**Appendix 3  
Phase 1 Key Contact List**

**Craig Myers**  
Federal On-Scene Coordinator  
US EPA Region 8 Response Section  
(c) 303.808.1738  
[Myers.Craig@epa.gov](mailto:Myers.Craig@epa.gov)

**Lawrence (Larry) P. Alheim**  
Safety Director | State On-Scene Coordinator  
Montana Department of Environmental Quality  
Office: 406-444-5382  
[LAlheim@mt.gov](mailto:LAlheim@mt.gov)

**David Stamey | CCEMT-P, EMT-T**  
Chief – Emergency Services  
Stillwater County Department of Emergency Services  
Emergency Management – 911 Coordination – Fire Warden  
Cell (406) 290-4833  
[dstamey@stillwatercountymt.gov](mailto:dstamey@stillwatercountymt.gov)

**Jeff Carpenter**  
Director – Training, Rules, & Safety | Montana Rail Link, Inc.  
Office: 406.628.3263  
[jcarpenter@mtrail.com](mailto:jcarpenter@mtrail.com)

**Devin Clary**  
Director of Environmental | Montana Rail Link  
Office: 406.523.1582  
[dclary@mtrail.com](mailto:dclary@mtrail.com)